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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,272	01/23/2004	Wang-On Kwok	MR1345-725	5533

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EXAMINER

SINGH, RAMNANDAN P

ART UNIT PAPER NUMBER

2646

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/762,272

Applicant(s)

KWOK, WANG-ON

Examiner

Ramnandan Singh

Art Unit

2646

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Drawings*

1. Figure 4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cha [US 6,788,962 B2] in view of Griffin [US 20050053225 A1] and further in view of Komuro et al [US 4,605,825].

Regarding claim 1, Cha teaches a telephone keypad layout shown in Fig. 2B, comprising:

15 keys arranged into an 3X5 array, the 15 keys including a set of number keys for entry of numbers 0.about.9, two function keys "\*" and "#", and three selector keys, the selector keys including a first selector (SHIFT) key (CO1), a second selector (ALT) key (CO2) and a third selector(CRTL) key (CO3), and 26 English letters. The first selector key for pressing by the user to switch the functions between Capital/Lower-case letter [Figs. 2B, 3; col. 4, line 51 to col.6, line 41; col. 6, line 56 to col. 8, line 17; col. 3, line 34 to col. 4, line 10].

Cha does not teach expressly arranging 26 English letters in pairs. However, arranging English letters in any combination including two or three is well-known in the art.

Griffin et al teach arranging English letters in a combination of two and three in a telephone keypad [Figs. 6-12; Para: 0046-0064].

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Griffin et al with Cha in order to mitigate the difficulty in using existing keypads with small handheld electronic devices [Griffin et al; Para: 0006].

Further, although Cha teaches adding other functions to the above three function keys without increasing the number of keys in the mobile communication terminal, he

Art Unit: 2646

does not teach expressly modifying the three functions keys to perform the functions as claimed.

Komuro et al teach a method for assigning functions to assignable-function keys on a telephone keypad [ Figs. 1-15; col. 3, line 58 to col. 6, line 35; col. 10, lines 6-55].

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Komuro et al with Cha by assigning more functions including the claimed ones to the above three function keys of Cha in order to reduce the operation time of a telephone line and improve the overall efficiency of office line use [Komuro et al; col. 1, line 63 to col. 2, line 2].

Regarding claims 2-3, Cha does not teach expressly a voice mode key and a message key. However, these two are special functions that can be assigned to function keys as shown above.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(i) Yang et al [US 6,005,498] teach telephone keypad layouts having special keys [Fig. 3; col. 2, line 63 to col. 3, line 31];

(ii) Danish et al [US 5,339,358 ] teach a method for converting a standard push button telephone keypad into a data entry terminal permitting full alphanumeric entry [Whole document];

(iii) Wen [US 4,825,464] teaches a 3X5 keypad [Figs. 9, -13; Abstract]; and

(iv) Schaupp, Jr. et al [US 5,594,778] teach a 3X5 keypad and selecting a mode using a menu function [Whole document].

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramnandan Singh whose telephone number is (571) 272-7529. The examiner can normally be reached on M-TH (8:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571) 272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ramnandan Singh  
Examiner  
Art Unit 2646



  
SINH TRAN

SU  PATENT EXAMINER